

In the Claims:

Please Cancel Claims 1-45

Please Insert the following Claims:

Sub B11  
46. A method of marking a particular tissue area within a human body to identify that particular tissue area for a later diagnostic or therapeutic procedure, said method comprising the steps of:

a) inserting a marker element applier into an incision in said body, wherein said marker element applier comprises:

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an introducer comprising:

a closed distal end;

a tube, wherein said tube comprises:

a lumen;

an axial opening at a proximal end of said tube;

a side exit port adjacent a distal end of said tube;

a closed distal end;

a proximal opening;

at least one discrete marker element positioned in said tube;

a shaft moveably positioned in said lumen, wherein a proximal end of said shaft extends from said axial opening;

b) positioning said side exit port adjacent the particular tissue area to be marked; and

c) ejecting said at least one marker element from said side exit port into said tissue to be marked, wherein said marker element is positioned in said tube distal to said shaft and said at least one marker element is forced out said side exit port by applying compressive force to said proximal end of said shaft.

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2 47. A method of depositing a marker element within tissue, said method comprising the steps of:

a) providing a marker instrument including a tube having a lumen, as side exit port adjacent to a distal end of said tube, a distal portion of said lumen connecting said lumen to said side exit port and a plurality of marker elements disposed within said lumen, including a first marker element at a proximal end of said plurality of marker elements and a second marker element at a distal end of said plurality of marker elements;

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b) inserting said tube into a body until said side exit port is proximate to the tissue to be marked; and

c) forcing said second marker element against said distal portion of said lumen and out said side exit port by applying a compressive force to a proximal end of said first marker element.

3 48. A method of depositing a marker element in tissue, said method comprising the steps of:

a) positioning a distal end of a marker element applier adjacent a first region of tissue to be marked; and

b) applying a compressive force to a marker element disposed within said marker element applier to force said marker element out a side exit port in said marker element applier.

4 49. A method according to Claim 48 wherein said method further comprises the step of:

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c) positioning said distal end of said marker element applier adjacent a second region of tissue to be marked; and

d) applying a compressive force to a second marker element disposed within said marker element applier to force said marker element out said exit port.

IN THE CLAIMS:

Please add the following Claims 50 - 78:

50. A method of marking a biopsy site, the method comprising the steps of:

- a) providing a marker element applier having a proximal end, a distal end, and a side exit port;
- b) providing a marker element adapted to be deployed from the marker element applier;
- c) positioning the side exit port of the marker element applier adjacent a site from which a biopsy sample has been taken; and
- d) applying a force to a marker element disposed within the marker element applier to deploy the marker element through the side exit port of the marker element applier.

51. The method of Claim 50 wherein the step of applying a force to the marker element comprises pushing the marker element,

52. The method of Claim 50 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element comprising a biodegradable material.

53. The method of Claim 52 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element comprising a biodegradable polymer.

54. The method of Claim 50 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element comprising a radiopaque material.

55. The method of Claim 50 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element comprising a non-metallic material.

11 56. The method of Claim 50 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element comprising a material selected from the group comprising polymers, salts, ceramics, calcium carbonate, and combinations thereof.

12 57. The method of Claim 50 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element which is expandable.

13 58. The method of Claim 50 comprising the step of using an imaging system.

14 59. The method of Claim 58 wherein the imaging system is selected from the group consisting of x-ray, ultrasound, and magnetic resonance imaging systems.

15 60. A method for use in a breast biopsy procedure, the method comprising the steps of:

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- a) positioning a marker element applier having a side exit port within breast tissue with the aid of an imaging system; and
  - b) deploying a marker element through the side exit port of the marker element applier.

14 61. The method of Claim 60 wherein the step of positioning the marker element applier comprises using an imaging system selected from the group consisting of x-ray, ultrasound, and magnetic resonance imaging systems.

12 62. The method of Claim 60 wherein the step of deploying the marker element comprises pushing the marker element.

18 63. The method of Claim 60 wherein the step of deploying the marker element comprises deploying a marker element comprising a biodegradable material.

19/ 64. The method of Claim 63 wherein the step of deploying the marker element comprises deploying a marker element comprising a biodegradable polymer. 18/

20/ 65. The method of Claim 60 wherein the step of deploying marker element comprises deploying a marker element comprising a radiopaque material. 15/

21/ 66. The method of Claim 60 wherein the step of deploying a marker element comprises deploying a biopsy marker element comprising a non-metallic material. 15/

22/ 67. The method of Claim 60 wherein the step of deploying a biopsy marker element comprises deploying a marker element comprising a material selected from the group comprising polymers, salts, ceramics, calcium carbonate, and combinations thereof. 15/

ca 2 23/ 68. A method for use in a breast biopsy procedure, the method comprising the steps of: Q3/

introducing a biopsy needle into a patient's breast;

removing a breast tissue biopsy sample through the biopsy needle;

introducing a marker element applicator having a side exit port into the biopsy needle while the biopsy needle is still within the patient; and

deploying a marker element from the side exit port of the marker element applicator to mark the biopsy site from which breast tissue was removed.

24/ 69. The method of Claim 68 further comprising the step of using an imaging system to assist in the method. 23/

25/ 70. The method of Claim 68 wherein the imaging system is selected from the group consisting of x-ray, ultrasound, and magnetic resonance imaging systems. 23/

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24/ 71. The method of Claim 68 wherein the step of deploying the marker element comprises pushing the marker element. 23

27/ 72. The method of Claim 68 wherein the step of deploying the marker element comprises deploying a marker element comprising a biodegradable material. 23

28/ 73. The method of Claim 68 wherein the step of deploying the marker element comprises deploying a marker element comprising a biodegradable polymer. 23

29/ 74. The method of Claim 68 wherein the step of deploying the marker element comprises deploying a marker element comprising a radiopaque material. 23

ca. 2 30/ 75. The method of Claim 68 wherein the step of deploying the marker element comprises deploying a marker element comprising a non-metallic material. 23

31/ 76. A method for use in a breast biopsy procedure, the method comprising the steps of:

introducing a biopsy needle into a patient's breast;

removing a breast tissue biopsy sample through the biopsy needle;

introducing a marker element applier into the biopsy needle; and

deploying a marker element comprising a biodegradable material from the marker element applier to mark the biopsy site.

32/ 77. The method of Claim 76 wherein the step of deploying the marker element comprises deploying a marker element comprising a biodegradable polymer. 31

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78. The method of Claim 76 comprising the step of using an imaging system selected from the group consisting of x-ray, ultrasound, and magnetic resonance imaging.

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